Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 2

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (previously presented): A compound according to formula (I):

X is selected from O or S;

 $R^1$  is selected from the groups:  $C_3$ - $C_{10}$  membered carbocycle substituted with 0-5  $R^4$ , and 3-10 membered heterocycle substituted with 0-5  $R^5$ , provided that if  $R^1$  is phenyl then  $R^1$  is substituted with 1-5  $R^4$ ;

 $R^2$  is selected from the groups: H,  $C_{1-10}$  alkyl substituted with 0-3  $R^6$ ,  $C_{2-10}$  alkenyl substituted with 0-3  $R^6$ ,  $C_{2-10}$  alkynyl substituted with 0-3  $R^6$ , -(CF<sub>2</sub>)<sub>m</sub>CF<sub>3</sub>,  $C_{3-10}$  membered carbocycle substituted with 0-5  $R^4$ , and 3-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S and substituted with 0-5  $R^5$ ;

 $R^3$  is selected from the groups: H, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, or C<sub>4-10</sub> cycloalkylalkyl;  $R^4$  is independently selected from the groups: halo, -CN, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7a</sup>, =O, OR<sup>7</sup>, COR<sup>7</sup>, CO2R<sup>7</sup>, CONR<sup>7</sup>R<sup>7a</sup>, NHC(O)NR<sup>7</sup>R<sup>7a</sup>, NHC(S)NR<sup>7</sup>R<sup>7a</sup>,

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 3

 $NR^7C(O)OR^{7b}$ ,  $NR^7C(O)R^{7b}$ ,  $SO_2NR^7R^{7a}$ ,  $SO_2R^{7b}$ , and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S; alternatively, when two  $R^4$ 's are present on adjacent carbon atoms they combine to form - OCH<sub>2</sub>O- or -OCH<sub>2</sub>CH<sub>2</sub>O-;

 $\rm R^5$  is independently selected from the groups: halo, -CN, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> haloalkyl, NR  $^7\rm R^{7a}$ , NR  $^7\rm C(O)OR^{7b}$ , NR  $^7\rm C(O)R^{7b}$ , OR  $^7$ , COR  $^7$ , COR  $^7$ , COR  $^7$ , COR  $^7\rm R^{7a}$ , CON(R  $^9\rm P^{10}$ ), CO(CH<sub>2</sub>)  $\rm m^{R^{10}}$ , NHC(O)NR  $^7\rm R^{7a}$ , NHC(S)NR  $^7\rm R^{7a}$ , SO<sub>2</sub>NR  $^7\rm R^{7a}$ , and SO<sub>2</sub>R  $^7\rm b$ ;

 $R^6$  is independently selected from the groups: halo, -CN, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7a</sup>, NR<sup>8</sup>NR<sup>8</sup>R<sup>8a</sup>, NR<sup>7</sup>C(O)OR<sup>7</sup>, NR<sup>7</sup>C(O)R<sup>7b</sup>, =O, OR<sup>7</sup>, COR<sup>7</sup>, CO2R<sup>7</sup>, CONR<sup>7</sup>R<sup>7a</sup>, NHC(O)NR<sup>7</sup>R<sup>7a</sup>, NHC(S)NR<sup>7</sup>R<sup>7a</sup>, SO<sub>2</sub>N<sup>7</sup>R<sup>7a</sup>, SO<sub>2</sub>R<sup>7b</sup>, C<sub>3-10</sub> membered carbocycle substituted with 0-5 R<sup>4</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S, substituted with 0-3 R<sup>7</sup>;

 $R^7$  is independently selected from the groups: H, halo, -CN, NO<sub>2</sub>, C<sub>1-4</sub> haloalkyl,  $R^8R^8a_N(CR^9R^9a)_m$ ,  $NR^8NR^8R^8a$ ,  $NR^8C(O)OR^8$ ,  $NR^8C(O)R^8$ , =O,  $R^8O(CR^9R^9a)_m$ ,  $COR^8$ ,  $CO_2R^8$ ,  $CONR^8R^8a$ ,  $NHC(O)NR^8R^8a$ ,  $NHC(S)NR^8R^8a$ ,  $SO_2NR^8R^8a$ ,  $SO_2R^{8b}$ ,  $C_{1-4}alkyl$ ,  $C_{3-6}cycloalkyl$ ,  $C_{4-1}Ocycloalkyl$ , phenyl, and benzyl;

 $R^{7a}$  is independently selected from the groups: H, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, phenyl, and benzyl;

alternatively, R<sup>7</sup> and R<sup>7a</sup>, together with the atoms to which they are attached, form a heterocycle having 4-8 atoms in the ring and containing an additional 0-1 N, S, or O atom and substituted with 0-3 R<sup>7c</sup>:

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 4

 $R^{7b}$  is independently selected from the groups: H, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, phenyl, and benzyl;

 $R^{7c}$  is independently selected from the groups: halo, -CN , N<sub>3</sub>, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7b</sup>, R<sup>8</sup>R<sup>8a</sup>N(CR<sup>9</sup>R<sup>9a</sup>)m, =O, OR<sup>7</sup>, R<sup>8</sup>O(CR<sup>9</sup>R<sup>9a</sup>)m, COR<sup>7</sup>, CO<sub>2</sub>R<sup>7</sup>, CONR<sup>7</sup>R<sup>7b</sup>, NHC(O)NR<sup>7</sup>R<sup>7b</sup>, NHC(S)NR<sup>7</sup>R<sup>7b</sup>, NR<sup>7</sup>C(O)OR<sup>7b</sup>, NR<sup>7</sup>C(O)R<sup>7b</sup>, C(=NR<sup>8</sup>)R<sup>8a</sup>, C(=NR<sup>8</sup>)NR<sup>8a</sup>R<sup>8b</sup>, SO<sub>2</sub>NR<sup>7</sup>R<sup>7b</sup>, SO<sub>2</sub>R<sup>7b</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S; R<sup>8</sup> is independently selected from the groups: H, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, phenyl and benzyl;

R<sup>8a</sup> is independently selected from the groups: H, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, phenyl and benzyl;

alternatively, R<sup>8</sup> and R<sup>8a</sup>, together with the atoms to which they are attached, form a heterocycle having 4-8 atoms in the ring and containing an additional 0-1 N, S, or O atom; R<sup>8b</sup> is independently selected from the groups: H, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, phenyl and benzyl;

R<sup>9</sup> is idependently selected from the groups: H, C<sub>1-4</sub> alkyl;

 $R^{9a}$  is independently selected from the groups: H,  $C_{1-4}$  alkyl;

R<sup>10</sup> is independently selected from the groups: NR<sup>7</sup>R<sup>7a</sup>, C<sub>3-10</sub> membered carbocycle substituted with 0-3 R<sup>7</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S, substituted with 0-3 R<sup>7</sup>; and

m is independently selected from 0, 1, 2, 3, and 4;

or a pharmaceutically acceptable salt thereof, an N-oxide form thereof, or a stereoisomer thereof.

Claim 2 (original): A compound according to claim 1, wherein:

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 5

X is O;

 $R^1$  is selected from the groups: C<sub>5-</sub>C<sub>6</sub> membered carbocycle substituted with 0-5  $R^4$ , and 5-6 membered heterocycle substituted with 0-5  $R^5$ .

Claim 3 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered carbocycle substituted with 0-5 R<sup>4</sup>, wherein the carbocycle is an aryl,cycloalkyl, or cycloalkenyl group.

Claim 4 (original): A compound according to claim 1, wherein:

X is O;

 $R^1$  is phenyl substituted with 0-5  $R^4$ .

Claim 5 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered cycloalkyl group substituted with 0-5 R<sup>4</sup>, wherein the cycloalkyl is cyclohexyl, cyclopentyl.

Claim 6 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered cycloalkenyl group substituted with 0-5 R<sup>4</sup>, wherein the cycloalkenyl group is cyclohexenyl, cyclopentenyl.

Claim 7 (original): A compound according to claim 1, wherein:

X is O;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 6

R<sup>1</sup> is a C<sub>5</sub>-C<sub>7</sub> membered heterocycle substituted with 0-5 R<sup>5</sup>, wherein the heterocycle is a heteroaryl,heterocyclenyl, or heterocyclyl group.

Claim 8 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5-</sub>C<sub>6</sub> membered heteroaryl substituted with 0-5 R<sup>5</sup>, wherein the heteroaryl is pyrazinyl, thienyl, isothiazolyl, oxazolyl, pyrazolyl, furazanyl, pyrrolyl, 1,2,4-thiadiazolyl, pyridazinyl, quinoxalinyl, phthalazinyl, imidazo[1,2-a]pyridine, imidazo[2,1-b]thiazolyl, benzofurazanyl, azaindolyl, benzimidazolyl, benzothienyl, thienopyridyl, thienopyrimidyl, pyrrolopyridyl, imidazopyridyl, benzoazaindole, 1,2,4-triazinyl, benzthiazolyl, furanyl, imidazolyl, indolyl, indolizinyl, isoxazolyl, isoquinolinyl, isothiazolyl, oxadiazolyl, pyrazinyl, pyridazinyl, pyrazolyl, pyridyl, pyrimidinyl, pyrrolyl, quinazolinyl, quinolinyl, 1,3,4-thiadiazolyl, thiazolyl, thienyl or triazolyl.

Claim 9 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heteroaryl substituted with 0-5 R<sup>5</sup>, wherein the heteroaryl is pyrazinyl, pyridazinyl, pyridyl, pyrimidinyl, thiazolyl or thienyl.

Claim 10 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heterocyclyl substituted with 0-5 R<sup>5</sup>, wherein the heterocyclyl is tetrahydropyranyl, pyrrolidinyl, imidazolidinyl, pyrazolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, or piperazinyl.

Claim 11 (original): A compound according to claim 1, wherein:

X is O;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 7

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heterocyclyl substituted with 0-5 R<sup>5</sup>, wherein the heterocyclyl is tetrahydropyranyl or morpholinyl.

Claim 12 (original): A compound according to claim 1, wherein:

X is O;

R<sup>1</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heterocyclenyl group substituted with 0-5 R<sup>5</sup>, wherein the heterocyclenyl group is 1,2,3,4- tetrahydrohydropyridine, 1,2-dihydropyridyl, 1,4-dihydropyridyl, 1,2,3,6-tetrahydropyridine, 1,4,5,6-tetrahydropyrimidine, 2-pyrrolinyl, 3-pyrrolinyl, 2-imidazolinyl, 2-pyrazolinyl, 3,4-dihydro-2*H*-pyran, or dihydrofuranyl.

Claim 13 (original): A compound according to claim 1, wherein:

X is O:

R<sup>3</sup> is selected from the groups: H, C<sub>1-4</sub> alkyl.

Claim 14 (original): A compound according to claim 1, wherein:

X is O;

R<sup>3</sup> is methyl.

Claim 15 (original): A compound according to claim 1, wherein:

X is O;

 $R^2$  is a C<sub>3-10</sub> membered carbocycle substituted with 0-5  $R^4$ , or a 3-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S and substituted with 0-5  $R^5$ .

Claim 16 (original): A compound according to claim 1, wherein:

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 8

X is O;

R<sup>2</sup> is C<sub>5</sub>-C<sub>6</sub> membered carbocycle substituted with 0-5 R<sup>4</sup>, wherein the carbocycle is an aryl,cycloalkyl, or cycloalkenyl group.

Claim 17 (original): A compound according to claim 1, wherein:

X is O;

 $\mathbb{R}^2$  is phenyl substituted with 0-5  $\mathbb{R}^4$ .

Claim 18 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is cycloalkyl substituted with 0-5 R<sup>4</sup>, a C<sub>5</sub>-C<sub>6</sub> membered cycloalkyl group substituted with 0-5 R<sup>4</sup>, wherein the cycloalkyl is cyclohexyl, cyclopentyl.

Claim 19 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is a C<sub>5-</sub>C<sub>6</sub> membered cycloalkenyl group substituted with 0-5 R<sup>4</sup>, wherein the cycloalkenyl group is cyclohexenyl, cyclopentenyl.

Clain 20 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is a C<sub>5</sub>-C<sub>7</sub> membered heterocycle substituted with 0-5 R<sup>5</sup>, wherein the heterocycle is a heteroaryl,heterocyclenyl, or heterocyclyl group.

Claim 21 (original): A compound according to claim 1, wherein:

X is O;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 9

R<sup>2</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heteroaryl substituted with 0-5 R<sup>5</sup>, wherein the heteroaryl is pyrazinyl, thienyl, isothiazolyl, oxazolyl, pyrazolyl, furazanyl, pyrrolyl, 1,2,4-thiadiazolyl, pyridazinyl, quinoxalinyl, phthalazinyl, imidazo[1,2-a]pyridine, imidazo[2,1-b]thiazolyl, benzofurazanyl, azaindolyl, benzimidazolyl, benzothienyl, thienopyridyl, thienopyrimidyl, pyrrolopyridyl, imidazopyridyl, benzoazaindole, 1,2,4-triazinyl, benzthiazolyl, furanyl, imidazolyl, indolyl, indolizinyl, isoxazolyl, isoquinolinyl, isothiazolyl, oxadiazolyl, pyrazinyl, pyridazinyl, pyrazolyl, pyridyl, pyrimidinyl, pyrrolyl, quinazolinyl, quinolinyl, 1,3,4-thiadiazolyl, thiazolyl, thienyl or triazolyl.

Claim 22 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heteroaryl substituted with 0-5 R<sup>5</sup>, wherein the heteroaryl is pyrazinyl, pyridazinyl, pyridyl, pyrimidinyl, thiazolyl or thienyl.

Claim 23 (orignal): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heterocyclyl substituted with 0-5 R<sup>5</sup>, wherein the heterocyclyl is tetrahydropyranyl, pyrrolidinyl, imidazolidinyl, pyrazolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, or piperazinyl.

Claim 24 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is a C<sub>5</sub>-C<sub>6</sub> membered heterocyclenyl group substituted with 0-5 R<sup>5</sup>, wherein the heterocyclenyl group is 1,2,3,4- tetrahydrohydropyridine, 1,2-dihydropyridyl, 1,4-dihydropyridyl, 1,2,3,6-tetrahydropyridine, 1,4,5,6-tetrahydropyrimidine, 2-pyrrolinyl, 3-pyrrolinyl, 2-imidazolinyl, 2-pyrazolinyl, 3,4-dihydro-2*H*-pyran, or dihydrofuranyl.

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 10

Claim 25 (original): A compound according to claim 1, wherein:

X is O;

 $R^2$  is phenyl substituted with 1-5  $R^4$ .

Claim 26 (original): A compound according to claim 1, wherein:

X is O;

 $R^2$  is phenyl substituted with 1-4  $R^4$ .

Claim 27 (original): A compound according to claim 1, wherein:

X is O;

 $R^2$  is phenyl substituted with 1-3  $R^4$ .

Claim 28 (original): A compound according to claim 1, wherein:

X is O;

 $R^2$  is phenyl substituted with 1-2  $R^4$ .

Claim 29 (original): A compound according to claim 1, wherein:

X is O;

 $R^2$  is phenyl substituted with  $R^4$ ;

R<sup>4</sup> is a 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S, wherein the heterocycle is a heteroaryl,heterocyclenyl, or heterocyclyl group.

Claim 30 (original): A compound according to claim 1, wherein:

X is O:

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 11

 $R^4$  is a 5-6 membered heteroaryl containing from 1-4 heteroatoms selected from O, N, and S, which is substituted with 0-5  $R^5$ .

Claim 31 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

 $R^4$  is  $NR^7R^{7a}$ .

Claim 32 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

 $R^4$  is  $NR^7R^{7a}$ ;

 $R^7$  and  $R^{7a}$ , together with the atoms to which they are attached, form a heterocycle having 4-8 atoms in the ring and containing an additional 0-1 N, S, or O atom and substituted with 0-3  $R^{7c}$ ; and

 $R^{7c}$  is independently selected from the groups: halo, -CN , N<sub>3</sub>, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7b</sup>, R<sup>8</sup>R<sup>8a</sup>N(CR<sup>9</sup>R<sup>9a</sup>)m, =O, OR<sup>7</sup>, R<sup>8</sup>O(CR<sup>9</sup>R<sup>9a</sup>)m, COR<sup>7</sup>, CO<sub>2</sub>R<sup>7</sup>, CONR<sup>7</sup>R<sup>7b</sup>, NHC(O)NR<sup>7</sup>R<sup>7b</sup>, NHC(S)NR<sup>7</sup>R<sup>7b</sup>, NR<sup>7</sup>C(O)OR<sup>7b</sup>, NR<sup>7</sup>C(O)R<sup>7b</sup>, C(=NR<sup>8</sup>)R<sup>8a</sup>, C(=NR<sup>8</sup>)NR<sup>8a</sup>R<sup>8b</sup>, SO<sub>2</sub>NR<sup>7</sup>R<sup>7b</sup>, SO<sub>2</sub>R<sup>7b</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

Claim 33 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 12

 $R^4$  is  $NR^7R^{7a}$ ;

 $R^7$  and  $R^{7a}$ , together with the atoms to which they are attached, form a heterocycle having 6-7 atoms in the ring and containing an additional 0-1 N atoms and substituted with 0-3  $R^{7c}$ ; and

 $R^{7c}$  is independently selected from the groups: halo, -CN , N<sub>3</sub>, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7b</sup>, R<sup>8</sup>R<sup>8a</sup>N(CR<sup>9</sup>R<sup>9a</sup>)m, =O, OR<sup>7</sup>, R<sup>8</sup>O(CR<sup>9</sup>R<sup>9a</sup>)m, COR<sup>7</sup>, CO<sub>2</sub>R<sup>7</sup>, CONR<sup>7</sup>R<sup>7b</sup>, NHC(O)NR<sup>7</sup>R<sup>7b</sup>, NHC(S)NR<sup>7</sup>R<sup>7b</sup>, NR<sup>7</sup>C(O)OR<sup>7b</sup>, NR<sup>7</sup>C(O)R<sup>7b</sup>, C(=NR<sup>8</sup>)R<sup>8a</sup>, C(=NR<sup>8</sup>)NR<sup>8a</sup>R<sup>8b</sup>, SO<sub>2</sub>NR<sup>7</sup>R<sup>7b</sup>, SO<sub>2</sub>R<sup>7b</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S. Claim 34 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

 $R^4$  is  $NR^7R^{7a}$ ;

R<sup>7</sup> and R<sup>7a</sup>, together with the atoms to which they are attached, form a 6-7 membered heterocyclyl group or a 6-7 membered heterocyclenyl group, substituted with 0-3 R<sup>7c</sup>; and

 $R^{7c}$  is independently selected from the groups: halo, -CN , N3, NO2, C1-4 alkyl, C3-6 cycloalkyl, C4-10 cycloalkylalkyl, C1-4 haloalkyl, NR  $^7R^{7b}$ , R8R8aN(CR9R9a)m, =O, OR7, R8O(CR9R9a)m, COR7, CO2R7, CONR7R7b, NHC(O)NR7R7b, NHC(S)NR7R7b, NR7C(O)OR7b, NR7C(O)R7b, C(=NR8)R8a, C(=NR8)NR8aR8b, SO2NR7R7b, SO2R7b, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

Claim 35 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 13

$$R^4$$
 is  $NR^7R^{7a}$ ;

R<sup>7</sup> and R<sup>7a</sup>, together with the atoms to which they are attached, form a 6-7 membered heterocyclyl group substituted with 0-3 R<sup>7c</sup>, wherein the heterocyclyl group is piperazinyl, or homopiperazinyl, and

 $R^{7c}$  is independently selected from the groups: halo, -CN , N<sub>3</sub>, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7b</sup>, R<sup>8</sup>R<sup>8a</sup>N(CR<sup>9</sup>R<sup>9a</sup>)m, =O, OR<sup>7</sup>, R<sup>8</sup>O(CR<sup>9</sup>R<sup>9a</sup>)m, COR<sup>7</sup>, CO<sub>2</sub>R<sup>7</sup>, CONR<sup>7</sup>R<sup>7b</sup>, NHC(O)NR<sup>7</sup>R<sup>7b</sup>, NHC(S)NR<sup>7</sup>R<sup>7b</sup>, NR<sup>7</sup>C(O)OR<sup>7b</sup>, NR<sup>7</sup>C(O)R<sup>7b</sup>, C(=NR<sup>8</sup>)R<sup>8a</sup>, C(=NR<sup>8</sup>)NR<sup>8a</sup>R<sup>8b</sup>, SO<sub>2</sub>NR<sup>7</sup>R<sup>7b</sup>, SO<sub>2</sub>R<sup>7b</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

Claim 36 (original): A compound according to claim 1, wherein:

X is O;

R<sup>2</sup> is phenyl substituted with R<sup>4</sup>;

 $R^4$  is  $NR^7R^{7a}$ :

R<sup>7</sup> and R<sup>7a</sup>, together with the atoms to which they are attached, form a 6-7 membered heterocyclenyl group substituted with 0-3 R<sup>7c</sup>, wherein the heterocyclenyl group is ,2,3,4-tetrahydropyridine, 1,2-dihydropyridyl, 1,4-dihydropyridyl, 1,2,3,6-tetrahydropyridine, or 1,4,5,6-tetrahydropyrimidine; and

 $R^{7c}$  is independently selected from the groups: halo, -CN , N<sub>3</sub>, NO<sub>2</sub>, C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, C<sub>1-4</sub> haloalkyl, NR<sup>7</sup>R<sup>7b</sup>, R<sup>8</sup>R<sup>8a</sup>N(CR<sup>9</sup>R<sup>9a</sup>)m, =O, OR<sup>7</sup>, R<sup>8</sup>O(CR<sup>9</sup>R<sup>9a</sup>)m, COR<sup>7</sup>, CO<sub>2</sub>R<sup>7</sup>, CONR<sup>7</sup>R<sup>7b</sup>, NHC(O)NR<sup>7</sup>R<sup>7b</sup>, NHC(S)NR<sup>7</sup>R<sup>7b</sup>, NR<sup>7</sup>C(O)OR<sup>7b</sup>, NR<sup>7</sup>C(O)R<sup>7b</sup>, C(=NR<sup>8</sup>)R<sup>8a</sup>, C(=NR<sup>8</sup>)NR<sup>8a</sup>R<sup>8b</sup>, SO<sub>2</sub>NR<sup>7</sup>R<sup>7b</sup>, SO<sub>2</sub>R<sup>7b</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 14

Claim 37 (original): A compound according to claim 1, wherein:

R<sup>7c</sup> is independently selected from the groups: C<sub>1-4</sub> alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>4-10</sub> cycloalkylalkyl, NR<sup>7</sup>R<sup>7b</sup>, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

Claim 38 (original): A compound according to claim 1, wherein the compound is selected from:

3-(4-piperazinophenyl)-5-((N-methyl- N-(2-

pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-homopiperazinophenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylhomopiperazino)phenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(4-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(2-pyrazinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(2-pyrimidinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 15

3-(4-piperazinophenyl)-5-((N-methyl-N-(2-thiazolyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(3-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-(2-pyrazinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-(2-thiazolyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-(3-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl- N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-ethylpiperazino)phenyl)-5-((N-methyl- N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-isopropylpiperazino)phenyl)-5-((N-methyl- N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 16

3-(4-(4-piperazinophenyl)-5-((N-methyl-N-cyclohexylamino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-(( N-methyl-N-cyclohexylamino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-ethylpiperazino)phenyl)-5-((N-methyl-N-cyclohexylamino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-isopropylpiperazino)phenyl)-5-(( N-methyl-N-cyclohexylamino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(1-methylpiperidin-4-yl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-homopiperazinophenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylhomopiperazino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-ethylhomopiperazino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-isopropylhomopiperazino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

Amendment and Response dated September 14, 2004

Reply to Office Action of July 23, 2004 Docket No.: PH-7262NP (1188-19)

Page 17

3-(4-(4-(N,N-dimethylamino)piperidino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-pyrrolidinopiperidino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-piperidino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(2,4-dimethylthiazol-5-yl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one; or pharmaceutically acceptable salt form thereof.

Claims 39-61 (cancelled)